
Using the Actifio Dashboard

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Preface

This document provides detailed instructions on how to use the Actifio Dashboard to view the status of your Actifio CDS or Sky appliance and the data it protects. It assumes you have read ***Getting Started with Actifio Copy Data Management***, are familiar with the components of the Actifio Documentation Library, and have a grasp of the basic concepts associated with an Actifio appliance.

For detailed, application-specific, step-by-step instructions on protecting and accessing application data, consult the user documents found in the Actifio Documentation Library. The following guides will be of particular interest:

- ***Setting Up Users and Roles With the Domain Manager***
- ***Configuring Resources and Settings With the Domain Manager***
- ***Planning and Developing Service Level Agreements***
- ***Virtualizing and Protecting Copy Data with the Application Manager***
- ***Accessing and Recovering Copy Data with the Application Manager***
- ***Replicating Data Using Actifio Appliances***

Actifio Appliances

Unless otherwise specified, all features and functions described in this document apply to all Actifio appliances.

The ActifioNOW Customer Portal

During the configuration and initialization of your Actifio appliance your Actifio representative provided you with a user name and password for the ActifioNOW customer portal.

From the ActifioNOW customer portal you can obtain detailed reports about your Actifio appliance, access the Actifio product documentation, including release notes, and search the knowledge base for answers to specific questions.

To log into the ActifioNOW customer portal:

1. Go to: <https://now.actifio.com>.
2. When prompted, enter the user name and password provided by your Actifio representative.

Actifio Support Centers

To contact an Actifio support representative, you can:

- Send email to: support@actifio.com
- Call:
 - From anywhere:** +1.315.261.7501
 - US Toll-Free:** +1.855.392.6810
 - Australia:** 0011 800-16165656
 - Germany:** 00 800-16165656
 - New Zealand:** 00 800-16165656
 - UK:** 0 800-0155019

Using the Actifio Desktop Dashboard

The Actifio Dashboard is the default first screen you see when you log on to the Actifio Desktop. The Dashboard gives you an at-a-glance view of system health and utilization. When a situation requires attention, calls-to-action are prominently displayed as red numbers that link to more information and corrective action. It presents current information about the operations of your Actifio appliance through a variety of widgets:

[Applications Widget](#) on page 2

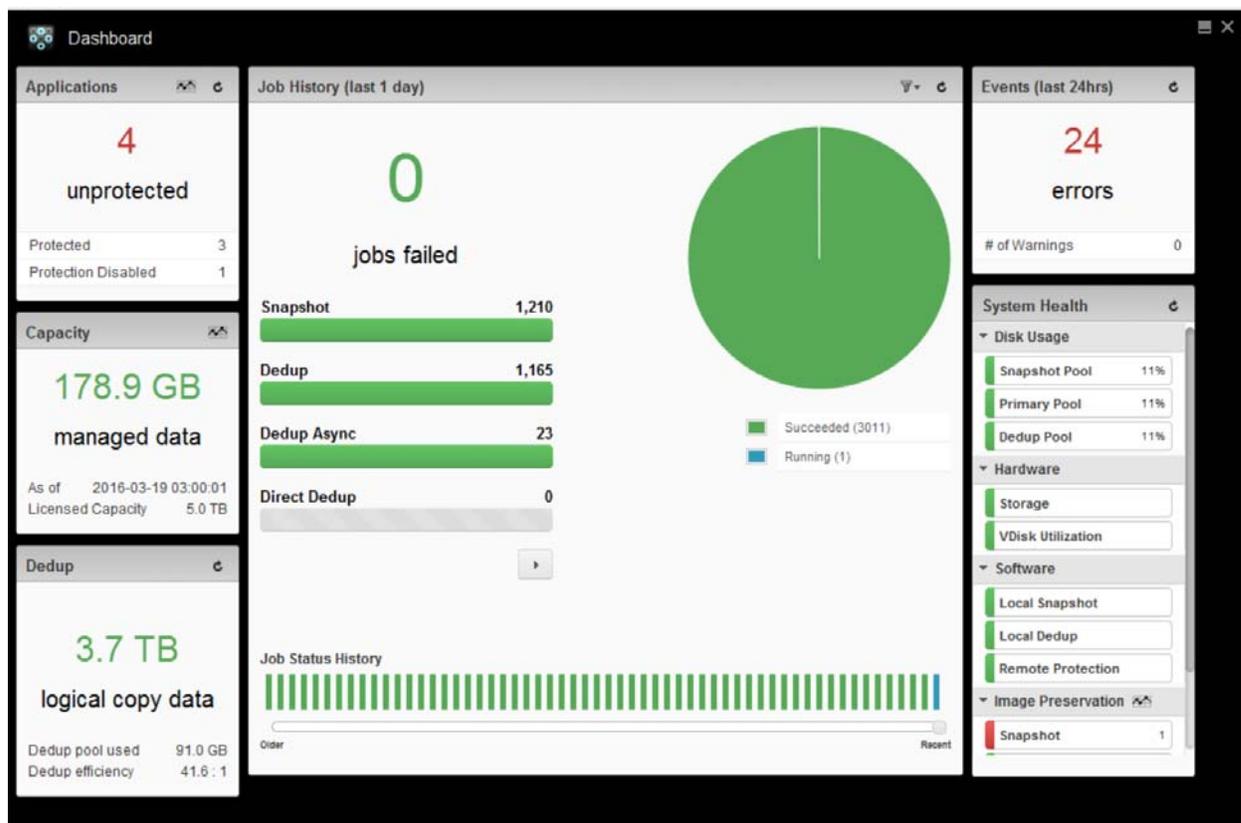
[Capacity Widget](#) on page 3

[Dedup Widget](#) on page 4

[Events Widget](#) on page 5

[System Health Widget](#) on page 6

[Job History Widget](#) on page 10



The Actifio Desktop Dashboard

Applications Widget

The Applications widget shows you:

Unprotected: How many of your discovered applications are unprotected. Click on the number to go to the Application Manager list of applications, filtered to show unprotected applications. There, you can assign protection or mark applications to be ignored.

Protected: How many of your discovered applications are protected (SLAs assigned to applications and protection enabled in the Application Manager). Click on the row to go to the Application Manager list of applications, filtered to show protected applications.

Protection Disabled: How many of your discovered applications have SLAs assigned to them but the protection is currently disabled. Click on the row to go to the Application Manager list of applications, filtered to show applications with protection disabled.

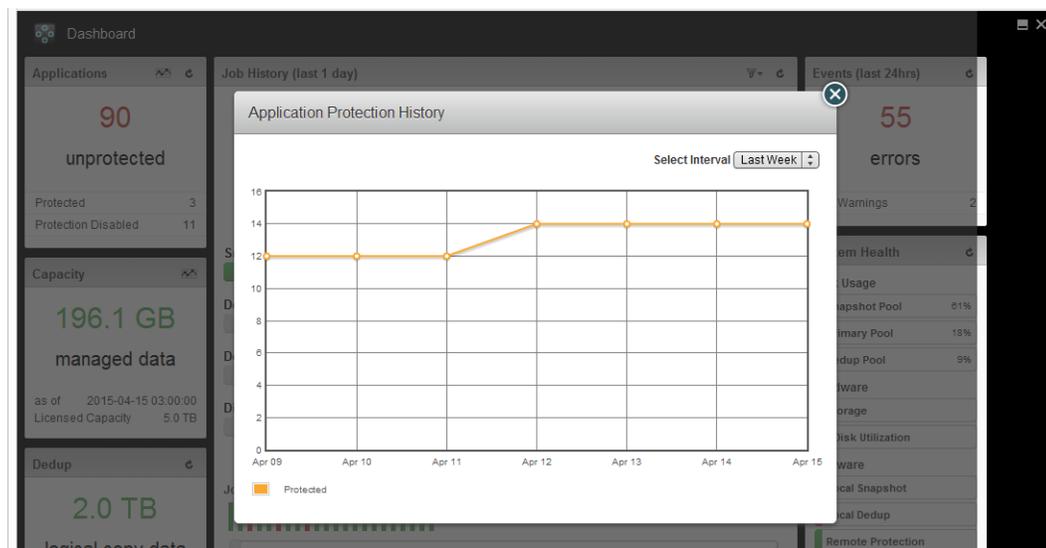


The Applications widget polls for fresh data every 10 seconds, and it includes a **Refresh** button in the upper right corner.



The Application Manager List Filtered to Show Unprotected Applications

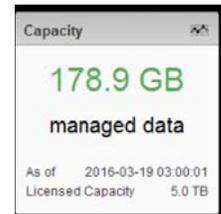
Beside the Refresh button is an Application Protection History button. It links to a graph that shows how many applications were protected on each day over the selected time period.



Application Protection History

Capacity Widget

Capacity is a measure of Actifio-managed copy data using the Managed Data License (MDL) metric. How this is calculated depends upon the type of application being protected:

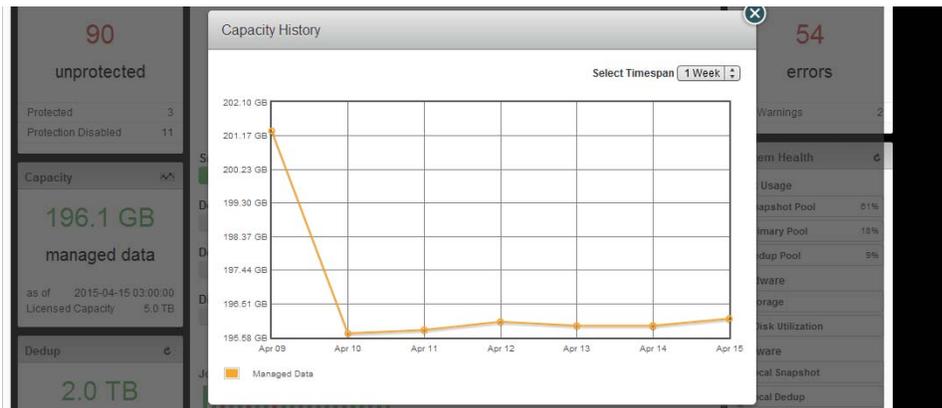


- **File systems:** The total size of the protected files used on the volume. This file system MDL calculation is applicable for the following types of file systems protected by an Actifio appliance: local, CIFS, NFS, and NAS.
- **Oracle databases:** The allocated size of the protected database files (allocated size includes database files and control files) but not transaction logs.
- **Microsoft SQL Server and SharePoint:** The total size of all database files (including .MDF, .LDF, and .NDF files). The log backups (.TRN files) captured during the log backups are not counted towards MDL.
- **Microsoft Exchange:** The total size of the EDB files and the log files.
- **Hyper-V:** Consistent with MDL measurement for out-of-band applications using the Actifio Connector as the Hyper-V solution leverages the Actifio Connector on the Hyper-V server. The size of .VHD and .VHDx files under protection will be counted towards MDL. This will be the actual size of the file on the disk.
- **VMware VM, only OS volume is protected:** The total allocated size of that protected volume. If the volume is thinly provisioned, then only the thinly allocated size is included. Any discovered applications with data on other volumes within that VM are counted separately towards consumed MDLs, as described in application-specific rules above.
- **VMware VM, all volumes are protected:** The total allocated size of all protected volumes. If volumes are thinly provisioned, then only the thinly allocated size is included. Discovered applications with data on these protected volumes that are assigned separate SLAs (and thus are protected both as VMs and as applications) are double counted. pRDMs and independent vRDMs are not included (since they are not protected).
- **Volumes protected in-band with Sync or Async replication and Generic applications:** The total size of all protected volumes (LUNs).
- **Consistency groups:** The total size of all protected files in a consistency group, calculated for the consistency group as a single MDL total.

Note the following considerations with MDL calculations:

- If the Actifio Connector is not installed, then the MDL is calculated based on the size of the volume protected. Actifio MDL takes into count the total device size of all managed volumes (LUNs).
- When database log protection is enabled, the Microsoft SQL Server log backups (.TRN files) are not counted towards MDL measurement. However Exchange log files are counted towards MDL consumption.
- Deleted applications' capacity is counted towards MDL usage until all backups are expired.

The Capacity widget polls for fresh data every 10 seconds. It also has a **Capacity History** button. The Capacity History button opens a chart of capacity over a period of a week or a month that you can select on the chart page.

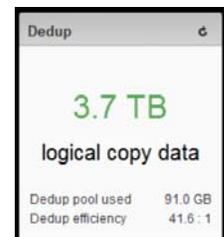


The Capacity History Graph

Dedup Widget

The Dedup widget shows the total amount of disk space that would be required of your protected data if it were not deduped.

- **Logical copy data:** How much space all of your deduped copy data would require if all point-in-time copies were rehydrated.
- **Dedup pool used:** How much actual disk space is required by your dedup pool to store your protected data.
- **Dedup efficiency:** The ratio of Logical copy data to Dedup pool used, a quick measure of efficiency and savings.



The Dedup widget polls for fresh data every 10 seconds, and it includes a **Refresh** button in the upper right corner.

Events Widget

The Events widget provides quick access to error and warning events that have occurred over the past 24 hours. You can click:

- **The errors number** to open the System Monitor filtered to show errors over the past 24 hours.
- The **# of Warnings row** to open the System Monitor filtered to show warnings over the past 24 hours.



The Events widget polls for fresh data every 10 seconds, and it includes a **Refresh** button in the upper right corner.

The screenshot shows the 'System Monitor' application window. The left sidebar has 'FILTER BY DATE' with 'LAST 24 HRS' selected, and 'FILTER BY TYPE' with 'WARNING' selected. The main area displays a 'List of events' table with columns: Clearable, Event Date, Event ID, Severity, Code, Component, and Event Summary. The table contains 9 rows of event data. At the bottom, it shows 'Updated: 2015-03-20 10:24:08 # Event: 9' and 'Page 1 of 1'.

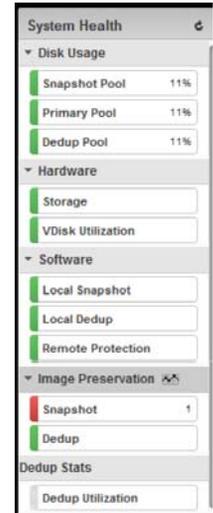
Clearable	Event Date	Event ID	Severity	Code	Component	Event Summary
	Mar 20 09:08	10032	warning		CDS	pool act_per_pool000 exceeded warning level (84).
	Mar 20 06:53	10033	warning		CDS	pool act_pri_pool000 exceeded warning level (83).
	Mar 20 06:28	10032	warning		CDS	pool act_per_pool000 exceeded warning level (82).
	Mar 20 06:08	10032	warning		CDS	pool act_per_pool000 exceeded warning level (82).
	Mar 20 05:53	10032	warning		CDS	pool act_per_pool000 exceeded warning level (82).
	Mar 19 15:15	10043	warning		CDS	SLA violation(s) found for application rh59vm12 on host rh59vm12 and template Katie SLA2 policy Snap policy type normal starttime 2015-03-19 15:15:00.383 violation time 2015-03-19 14:59:00.0 violation type not run jobs expected 59 job tolerance 0 jobs succeeded 5 jobs failed 0 error code 0 source UDS 590021132518 job id 0 job class snapshot message No slots were available for job
	Mar 19 15:15	10043	warning		CDS	SLA violation(s) found for application rh59vm13 on host rh59vm13 and template Katie SLA3 - on demand policy Snap policy type normal starttime 2015-03-19 15:15:00.407 violation time 2015-03-19 14:59:00.0 violation type not run jobs expected 49 job tolerance 0 jobs succeeded 2 jobs failed 0 error code 0 source UDS 590021132518 job id 0 job class snapshot message No slots were available for job
	Mar 19 14:44	43940	warning		CDS	Disk space usage on datastore Rack59v3700Datastore (82%) has grown beyond the warning threshold 80%
	Mar 19 11:22	82001	warning	2100	platform	Service restart failure

The System Monitor List Filtered to Show Errors

System Health Widget

The System Health widget provides an overview of resource usage and system health. Each element provides additional information in a flyout panel as you mouse over it.

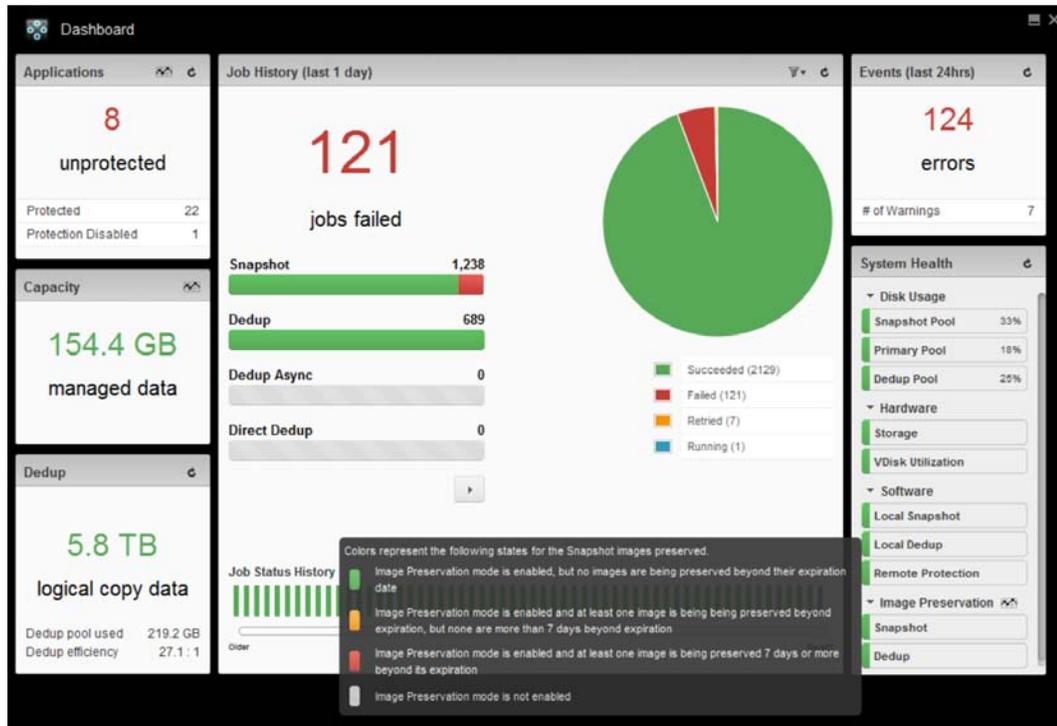
- **Disk Usage:** Current percent utilization of the default pools (Snapshot, Primary, and Dedup pools). If you do not have access to that information, then you see no values. Clicking the Snapshot Pool, Primary Pool, or Dedup Pool label displays the associated pool window in the Domain Manager.
- **Hardware:** Status of storage resources and VDisk utilization.
- **Software:** Status of local snapshot, local dedup, and remote protection.
- **Image Preservation:** Status of all preserved snapshot images and preserved dedup images.
- **Dedup Stats:** Status of the load on the dedup engine. Clicking the Dedup Utilization label displays the System Load Info window under Diagnostics in the Domain Manager.



The System Health widget polls for fresh data every 20 seconds, and it includes a **Refresh** button in the upper right corner.

If the blocks in the System Health panel are green then this means that everything is working normally within the set resource parameters for the Actifio appliance. If there are any other colors visible (red, yellow, or in some cases, gray), then open an Actifio Support case. See the table below for a legend of different state colors of the different system health components in the Dashboard.

Note: At the bottom of the list, a **Schedules** link appears only when *Disable Schedules* is selected in the Domain Manager > System > Configuration > Appliance Settings > Control Panel. Schedules may be disabled during an upgrade.



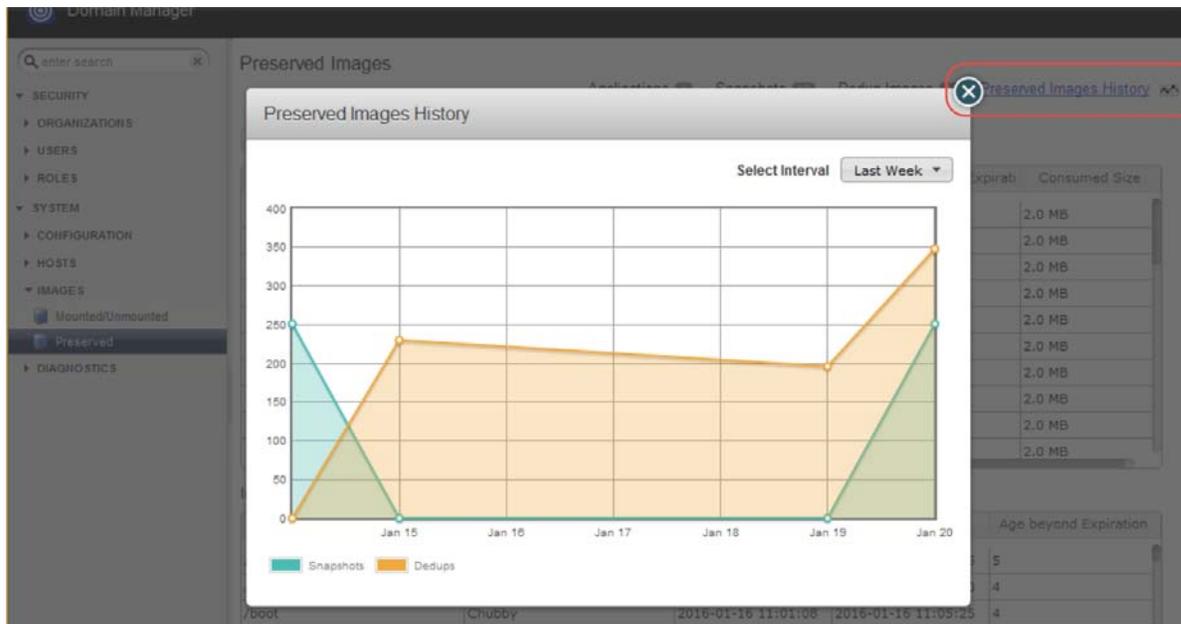
The System Health Widget includes Health Information on Flyout Panels

This table outlines the state colors of the System Health components in the Dashboard for an Actifio appliance.

System Health Component	Legend
Disk Usage	
Snapshot Pool	<ul style="list-style-type: none"> Green = Pool usage is in accordance with user specifications. Yellow = Pool usage is over the specified warning limit. Red = Pool usage is over the specified safe limit. <hr/> <p>Note: Clicking the Snapshot Pool label displays the Snapshot Pool window in the Storage Pools section of the Domain Manager. See Configuring Resources and Settings With the Domain Manager in the Actifio Documentation Library.</p> <hr/>
Primary Pool	<ul style="list-style-type: none"> Green = Pool usage is in accordance with user specifications. Yellow = Pool usage is over the specified warning limit. Red = Pool usage is over the specified safe limit. <hr/> <p>Note: Clicking the Primary Pool label displays the Primary Pool window in the Storage Pools section of the Domain Manager. See Configuring Resources and Settings With the Domain Manager in the Actifio Documentation Library.</p> <hr/>
Dedup Pool	<ul style="list-style-type: none"> Green = Pool usage is in accordance with user specifications. Yellow = Pool usage is over the specified warning limit. Red = Pool usage is over the specified safe limit. Gray = Dedup system is not accessible. <hr/> <p>Note: Clicking the Dedup Pool label displays the Dedup Pool window in the Storage Pools section of the Domain Manager. See Configuring Resources and Settings With the Domain Manager in the Actifio Documentation Library.</p> <hr/>
Hardware	
Storage	<ul style="list-style-type: none"> Green = Storage is in good condition. Yellow = One or more VDIs are in a degraded condition. Red = One or more VDIs are in offline mode. Gray = Service or data is not available.
VDisk Utilization	<ul style="list-style-type: none"> Green = VDisk counts are below the specified warning limit. Red = VDisk counts are above the specified warning limit. Gray = Service or data is not available.

System Health Component	Legend
Software	
Local Snapshot	<ul style="list-style-type: none"> Green = Snapshot software component is active. Red = Snapshot software component is off.
Local Dedup	<ul style="list-style-type: none"> Green = Dedup software component is active. Yellow = Solid-state Drive (SSD) memory is not in optimal state. Red = Dedup software component is off.
Remote Protection	<ul style="list-style-type: none"> Green = Replication software component is in good condition. Yellow = One or more replication jobs are stalled. Red = Replication software component is offline. Gray = Replication software component is disabled.
Image Preservation	
Snapshot	<ul style="list-style-type: none"> Green = No snapshot images are being preserved beyond their expiration date. Yellow = At least one snapshot image is being preserved beyond expiration but no images are more than 7 days beyond expiration. Red = At least one snapshot image is being preserved beyond expiration and at least one image is more than 7 days beyond expiration. Gray = Image Preservation mode is not enabled.
Dedup	<ul style="list-style-type: none"> Green = No dedup images are being preserved beyond their expiration date. Yellow = At least one dedup image is being preserved beyond expiration but no images are more than 7 days beyond expiration. Red = At least one dedup image is being preserved beyond expiration and at least one image is more than 7 days beyond expiration. Gray = Image Preservation mode is not enabled.
Dedup Stat	
Dedup Utilization	Clicking the Dedup Utilization label displays the System Load Info window in the Diagnostics section of the Domain Manager. See <i>Configuring Resources and Settings With the Domain Manager</i> in the Actifio Documentation Library.

The Image Preservation History button opens a chart of how many images were preserved over a period of a week or a month that you can select on the chart page. See **Configuring Resources and Settings With the Domain Manager** in the Actifio Documentation Library for details on image preservation and viewing preserved images history.



Viewing Preserved Images Status in the Dashboard

Job History Widget

The Job History widget is the centerpiece of the Dashboard. It polls for fresh data every 10 seconds, and it includes a **Refresh** button and a **Filter icon** in the upper right corner. You can use the filter icon to select one day, one week, one month, or three-month periods to review, and to limit the type of applications displayed. Supported jobs displayed in the Job History widget include jobs such as: Snapshot, Dedup, Dedup Async, Direct Dedup, Dedup Remote, StreamSnap, OnVault, Garbage Collection, and Mount. You can display four different job types at a time in the Job History widget.

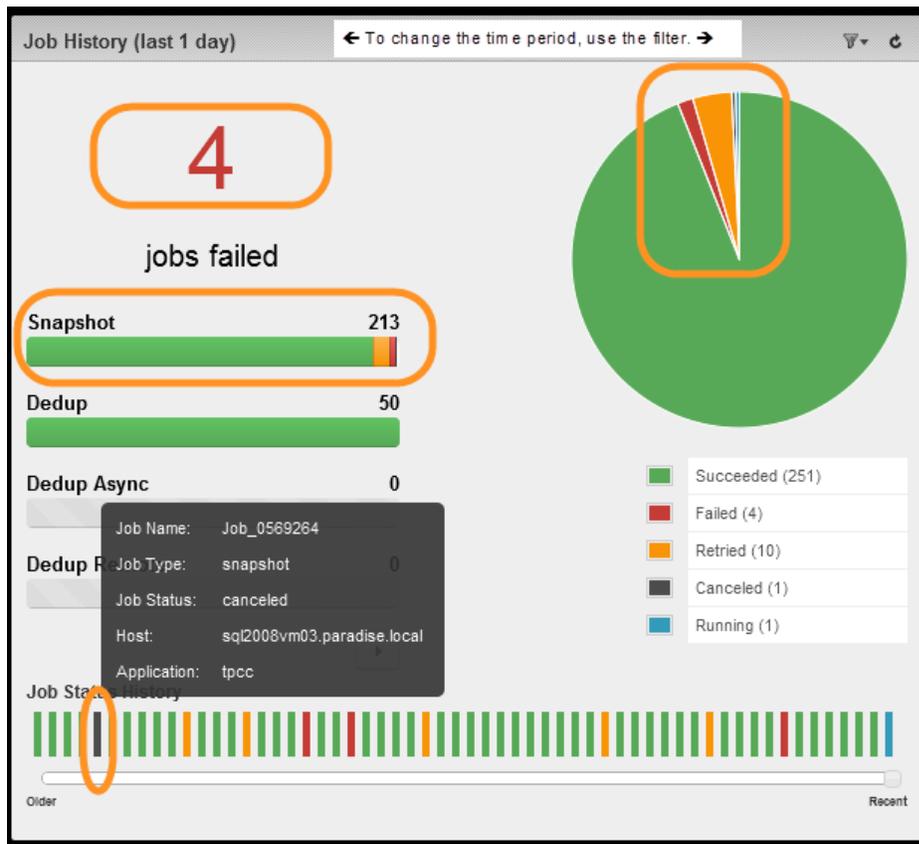


Note: For a complete list of supported job types, see *Using the System Monitor to Monitor Jobs and Events* in the Actifio Documentation Library.

The widget provides an overview and links to details of:

- **Pie chart:** a quick view of how many jobs have succeeded, failed, were retried or canceled, or are currently running.
- **Failed jobs:** a link to the System Monitor filtered to failed jobs over the selected period.
- **Status of jobs by 12 types,** each of which is a link to the System Monitor filtered to show the status of jobs of that type over the selected period. The display shows four job types at a time, and the arrow beneath them allows you to go to the other two pages of job types.

A scrollable display of **Job Status History**. This allows you to access details on failed, canceled, and other jobs quickly. The scroll bar permits you to scroll leftward back through time to older jobs within the selected period.



Links of the Job History Widget